DOCUMENT RESUME

ED 477 418 RC 024 096

AUTHOR Sims-Giddens, Susan

TITLE Graduation and Success Rates of Mexican-American

Undergraduate Nursing Students in an Associate Degree Nursing

Program.

PUB DATE 2002-02-00

NOTE 18p.; In: An Imperfect World: Resonance from the Nation's

Violence. 2002 Monograph Series, Proceedings of the Annual Meeting of the National Association of African American Studies, the National Association of Hispanic and Latino Studies, the National Association of Native American Studies,

and the International Association of Asian Studies (Houston,

TX, February 11-16, 2002).

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE EDRS Price MF01/PC01 Plus Postage.

DESCRIPTORS Associate Degrees; Cultural Awareness; English (Second

Language); Family Influence; Graduate Surveys; *Graduation

Rate; Higher Education; *Hispanic American Students;

*Language Proficiency; *Licensing Examinations (Professions);

*Mexican Americans; *Nursing Education; Nursing Students;

Spanish -Speaking

IDENTIFIERS Academic Language; Arizona

ABSTRACT

A study compared graduation and licensure examination pass rates of Mexican American nursing students who spoke English as a second language and students who spoke English as a first language. Mexican American students were surveyed or interviewed concerning the effect on graduation and licensure examination pass rates of English as a second language, nonacademic English proficiency, non-English speaking parents, and parental financial support. Of 67 Mexican American students who graduated from the nursing program with an associate's degree and passed the National Council Licensure Examination in Arizona between 1967 and 1995, 13 were interviewed in a focus group and 54 completed surveys. Quantitative data were collected from archival records. No significant difference in program completion was found between Mexican American students and native English speakers, while 73 percent of Mexican American graduates and 94 percent of English-as-firstlanguage graduates passed the licensure exam on the first attempt. Spanishspeaking patients were more comfortable communicating with Spanish-speaking caregivers. Spanish-speaking students experienced difficulty reading nursing texts. Focus group participants stated that understanding how to read and comprehend multiple choice questions would have helped them on examinations. Family support was important to completion of the nursing program. Most respondents did not feel their families could have been more financially supportive, and most respondents had to work while in nursing school. Implications for educational institutions are discussed. (TD)



GRADUATION AND SUCCESS RATES OF MEXICAN-AMERICAN UNDERGRADUATE NURSING STUDENTS IN AN ASSOCIATE DEGREE **NURSING PROGRAM**

SUSAN SIMS-GIDDENS, EDD, MSN, RNCS SOUTHWEST MISSOURI STATE UNIVERSITY SPRINGFIELD, MISSOURI

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE



Graduation and Success Rates of Mexican-American Undergraduate Nursing Students in an Associate Degree Nursing Program

Overview: Retaining Hispanic students in the educational environment is an issue at both the community college and university levels. The majority of Hispanic students are concentrated disproportionately in community colleges, and the drop-out rates for Mexican-American women in these colleges is 43% higher than Anglo-American female students (Wycoff, 1996). Regardless of gender, non-attainment of personal aspirations or goals persist, and minority youth perceive that they have few career choices and opportunities, and that they are less likely to obtain employment in their chosen field (Constantine & Erickson, 1998).

Minority students who enter the health care field find an absence of role models and will need additional support from the college or university in which they enroll (Trevino & Sumaya, 1993). In the nursing profession, the lack of minority representation is specifically documented by nursing professional organizations. The enrollment of Mexican-American students in



schools of nursing from 1991 through 1996 increased only .8% (from 3.1 to 3.9%). During that same time period, the graduation rate of Mexican-American nursing students from schools of nursing increased only .6%, from 2.8 to 3.4% (NLN, 1997).

The changing demographics in the United States present a challenge to the nursing profession. Nursing provides direct care to the community population and one of the founding principles of nursing care is to include the client as an active participant in the decisions made about his or her health care. To accomplish this principle the nurse, as a health care provider, must establish a trusting relationship with the client. To successfully establish a trusting relationship, an understanding of the client's background is necessary to provide holistic quality care. Mexican-American health care professionals can provide cultural sensitivity in health care delivery and provide role models for youth.

The number of working Mexican-American nurses in the workforce has been published and compared to total minority populations in the United States. However, exact numbers of Mexican-American student nurses who have been accepted, who have graduated, and passed the National Council Licensure Examination for Registered Nurses, as compared to non-minority



students, have not been evaluated. Additionally, factors affecting personal success have not been reported.

Objective: This study described and compared the graduation rates and National Council Licensure Examination pass rates of Mexican-American students with English as first-language students in an undergraduate associate degree nursing program. Additionally, this study determined the Mexican-American students' perceived effects of the following on graduation rates and National Council Licensure Examination pass rates: English as a second language, non-academic English proficiency, non-English speaking parents, and parental financial support.

Study Concepts/Variables: The variables of the study were:

a) graduation rates; b) Arizona State Board of Nursing

Examination pass rates on the first try; c) perceived effects of

English as a second language, non-English speaking parents, and

parental financial support on associate degree nursing program

completion, and d) perceived effect of non-academic English

proficiency on course completion in higher education.



Design: This was a descriptive study using multiple methods and sources, which incorporated both quantitative and qualitative measures. Data sources included archival data, a focus group interview, and a self-report survey. Archival data were collected from nursing department records in an associate degree nursing program. A researcher-designed focus group interview and self-report survey were used to collect data from Mexican-American nursing graduates. Data from different sources were compared to clarify and elaborate areas of research that could not be evaluated using a single method data collection.

Sample: The study population consisted of all English as second-language Mexican-American and English as first-language students accepted into the nursing program from 1967 through 1995 (N = 895). Of the total study population, 15% of nursing program admissions (n = 130) were Mexican-American students and 85% (n = 765) were English as first-language students.

Of the 130 Mexican-American students accepted into the nursing program from 1967 through 1995, 67 students graduated and pass the National Council Licensure Examination in Arizona. Choosing every fifth name from an alphabetical list of Mexican-



American student names, a simple random sample was drawn for a focus group interview (n = 13). The remaining subjects (n = 54) were asked to complete a self-report survey.

Setting: The setting was an associate degree nursing program in a regional community college in Southwest Arizona. The nursing student population is approximately 15% Hispanic, the college student population is approximately 40% Hispanic, and the regional community population is approximately 49% Hispanic.

Measurement: Archival data were collected from student records yielding specific numbers of students admitted and graduated from the associate degree nursing program. Additionally, data were collected from records indicating the first-time pass rate on the National Council Licensure Examination.

The focus group interview allowed participants to answer questions more in-depth and share specific examples from lived experiences. Interviews were tape-recorded, transcribed, and analyzed for patterns and themes.

The Nursing Graduate Self-Report Survey included multiple choice and open-ended questions about use of the English



language, opinions about personal bilingual abilities in home and work settings, and feelings about parental language abilities and support during nursing education. Surveys were analyzed for multiple choice selections and short answer responses.

The quantitative results were triangulated with qualitative data obtained from the content analysis.

Data Collection Methods: Descriptive data were gathered from records of students who were enrolled between the years 1972 and 1994. A focus group interview was conducted by the researcher to elicit feeling and opinion responses regarding English as a second language, non-academic English proficiency, non-English speaking parents, and parental financial support.

A Nursing Graduate Self-report Survey was mailed to all Mexican-American students except focus group participants who successfully completed the program and passed the National Council Licensure Examination for Registered Nurses from 1969 through 1997.

Permission was obtained from the educational institution to conduct the study. Confidentiality of subject records was assured by shredding data with names after surveys and focus group



invitations were mailed. Surveys were returned anonymously. Focus group subjects signed a consent form to participate and were assured of confidentiality when responses were reported.

Data Analysis: The Siegel formula (Isaac & Michael, 1990, p. 178) for chi-square was used to determine if there was a significant difference between the graduation rates and the pass rates on the National Council Licensure Examination for Registered Nurses between Mexican-American and English as first-language students. The significance level was set at $p \le 0.05$ for chi-square.

Qualitative data analysis for data obtained from the focus group interview included analysis of the audio-tape recordings and field notes to transform data into themes and patterns. Descriptive statistics were completed and used to report data on returned surveys. Open-ended responses and suggested strategies for future English as second-language students were noted. The open-ended responses and suggested strategies were compared to the data gathered from the focus group interview.



Findings: A comparison of the percentages of Mexican-American and English as first-language students that completed an associate degree nursing program was not significantly different. Of the 130 Mexican-American students who were admitted, 60% completed the associate degree nursing program. Of the 765 English as firstlanguage students who were admitted, 69% completed the associate degree nursing program. There was a 9% difference between the two groups using the Siegel formula for chi square (X²) $_{crit} = 3.84, X_{obt}^2 = 3.38$).

However, the difference between the percentage of Mexican-American and English as first-language students that passed the National Council Licensure Examination on the first attempt was significant (p \leq .05). Of the 78 Mexican-American students who completed the associate degree nursing program, 73% passed the National Council Licensure Examination on the first attempt. Of the 525 English as first-language students who completed the associate degree nursing program, 94% passed the National Council Licensure Examination for Registered Nurses on the first attempt. A 21% difference was found between the two groups and using the Siegel formula for chi square the

 $(X^2_{crit} = 3.84, and X^2_{obt} = 36.76 p \le .05).$



The following qualitative data were obtained in this study:

Qualitative Question One: What is the perceived effect of English as a second language on Mexican-American student completing an associate degree nursing program?

Focus group interview participants and self-report survey participants stated that there are benefits and detriments to knowing two languages when in nursing school. One benefit reported by both groups is the amount of in-depth knowledge obtained from Spanish speaking clients in the clinical area. Additionally, both groups stated that "Spanish speaking patients were more comfortable communicating with Spanish speaking caregivers." One detriment identified by a focus group interview participant was the difficulty experienced with reading nursing texts. The participant stated, "I am reading in English but in order to comprehend you translate it into Spanish in your mind...the meaning could be taken out of context into something else that you don't understand."

As reported by Fueyo (1997), language-minority students may have a wide range of communication skills and cognitive proficiency in both written and spoken English. Hymes (1972)



used the term communicative competence to refer to the individual's awareness of appropriate language used in specific contexts. To adequately understand an individual student's communicative competence and cognitive proficiency in English, an assessment of language ability should be completed. Once the assessment of language ability is completed, the educational process can reflect and assist in the language needs of the language minority student (Walker, 1994).

Qualitative Question Two: What is the perceived effect of non-academic English proficiency on Mexican-American students' course completion in higher education?

All focus group interview participants stated classes on test-taking skills would have assisted in completion of their general education courses. Specific programs in higher education, such as nursing, frequently tests content knowledge in a multiple-choice format with only one right answer (Crow, 1993). Not only is nursing content tested in a multiple-choice format but the National Council Licensure Examination for Registered Nurses is given in multiple-choice format. Understanding how to read and comprehend multiple choice questions on an examination would



benefit language minority students during their general and nursing education, as well as when preparing for the licensure examination.

Qualitative Question 3: What is the perceived effect of non-English speaking parents on Mexican-American students completing an associate degree nursing program?

Respondents in both the focus group and the self-report survey group stated that family support was important to completion of the nursing program. For those students who are geographically close to family, the family can offer emotional support and encouragement to the language minority student. Additionally, one self-report survey respondent did state that "having a mentor to speak with before, during, and after nursing school" would have helped them be more successful in nursing school. As discussed by Campbell and Dickson (1996), a non-cognitive factor identified for minority students in higher education was the availability of a strong support person who served as a role model for the minority student.



Qualitative Question 4: What is the perceived effect of parental financial support on Mexican-American students completing an associate degree nursing program?

Financial support for students in higher education can come from many sources. Family financial support is only one source for tuition and books when students are in higher education. Of self-survey respondents, 85% did not feel their families could have been more financially supportive. Additionally, 57% of the self-report survey respondents indicated they had to work full or part-time when in nursing school. One self-report survey respondent stated, "Working 40 to 50 hours a week and going to school full-time is very difficult." Another respondent stated, "Having to work less so I could concentrate more on studying would have helped me be more successful in nursing school."

Academic achievement and completion of course work at the college level is dependent on several factors. One such factor is that minority nursing students may be from a lower socioeconomic group. Although academic achievement is dependent on intellectual or academic ability, economic influences such as having to work full or part-time can affect academic performance (Holtz & Wilson, 1992).



Implications: This study provides the foundation for continued research of the Mexican-American student in associate degree nursing programs. Replication studies with different geographic settings and increased sample size will increase the knowledge base of special academic needs identified by Mexican-American nursing students.

Recommendations for educational setting include:

- 1. The publication and active recruitment of English as second-language students for existing programs provided by the Department of Student Services. Focus group and survey participants identified specifically the need for test-taking skill classes to enhance second language students' ability to achieve academically.
- 2. The development and implementation of a language needs assessment program. The assessment of non-academic English proficiency in each Mexican-American student will allow strategies to be individualized and implemented to provide the greatest opportunity for academic achievement.
- 3. An individual financial aid assessment for each nursing student is needed. Fifty-seven percent of the survey respondents indicated they worked full or part-time during their nursing education. The respondents stated that by working they were not able to spend as much time with their study of nursing.
- 4. The development and implementation of a mentoring program for Mexican-American students in higher education are needed. A mentoring program would match a mentor with a student to provide emotional support for those students who request a mentor or who do not have family members to provide emotional support.



- 5. The provision for child care or pre-school on college campuses. One focus group participant stated, "There's a lot of young mothers that want to go back to college but they have kids. The kids are too small for or they don't have the money for a day care."
- 6. The development and implementation of a mentoring program for high school students who self-identify the interest in nursing as a career. Working with high school students would provide guidance and a mentoring relationship for students early in their educational process. This program could provide insight into opportunities the nursing profession can offer as well as role models for future members of the nursing profession.

Expansion of current research should include:

- 1. Replication of this study with a larger sample and in different education settings.
- 2. Development and testing of models of predictors for academic achievement.
- 3. Additional qualitative research to identify other personal factors that may influence academic achievement.
- 4. Development, implementation, and assessment of programs for recruitment and retention.



References

- Campell, A.R., & Dickson, C.J. (1996). Predicting student success:

 A 10-year review using integrative review and metaanalysis. *Journal of Professional Nursing*, 12 (1), 47-59.
- Constantine, M.G., & Erickson, C.D. (1998). Challenges to the career development of urban racial and ethnic minority youth: Implications for vocational intervention. *Journal of Multicultural Counseling & Development*, 26 (2), 82-95.
- Crow, K. (1993). Multiculturalism and pluralistic thought in nursing education: Native American world view and the nursing academic world view. *Journal of Nursing Education*, 32, 198-204.
- Fueyo, V. (1997). Below the tip of the iceberg: Teaching languageminority students. *Teaching Exceptional Children*, 30, 61-65.
- Holtz, C., & Wilson, C. (1992). The culturally diverse student: A model for empowerment. *Nurse Educator*, 17 (6), 28-31.
- Hymes, D. (1972). On communicative competence. In J.B. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 269-293). Harmonsworth, England: Penguin.
- National League for Nursing. (1977). Nursing datasource, 1977: Trends in contemporary RN nursing education. NLN Center for Research in Nursing Education & Community Health. New York: National League for Nursing Press.
- Trevino, F.M., & Sumaya, C. (1993). Increasing the representation of Hispanics in the health professions. *Public Health Reports*, 108 (5), 551-559.
- Walker, L. (1994, June-July). Foreign languages and technicaloccupational programs: Local needs and global imperatives. *Community College Journal*, 24-28.



Wycoff, S.E.M. (1996). Academic performance of Mexican American women: Sources of support that serve as motivating variables. *Journal of Multicultural Counseling & Development*, 24 (3), 146-156.



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC REPRODUCTION RELEASE

I	Document	Identi	fication
1.	Document	IUCIILI	ncauch.

Title: An Imperfect World: Resonance from the Nation's Violence (2002 Monograph Series)

Editor: Lemuel Berry, Jr., Ph.D.

Corporate Source:

Publication Date: 2002

II. Reproduction Release:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

	mission is granted to reproduce and disseminate the identified document, please check one of the wing three options and sign the release form.
<u>.</u> :_	Level 1 - Permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) and paper copy.
	Level 2A - Permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.
	Level 2B - Permitting reproduction and dissemination in microfiche only.
D	

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no option is marked, documents will be processed at Level 1.

Sign Here: "I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature Jemul Bury 2

Position: Executive Director

Printed Name: Lemuel Berry, Jr.

Organization: NAAAS, NAHLS, NANAS, IAAS

Address: PO Box 325 Biddeford, ME 04005-0325 Telephone No: 207-282-1925 839-8004

Date: 5/20/03



III. Document Availability Information (from Non-ERIC Source):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:		
Address:		
Price per copy:	Quantity price:	
IV. Referral of ERIC to Copyright/Reproduction Right	s Holder:	
If the right to grant this reproduction release is held by someone other than the addressee, please complete the following:		
Name:		
Address:		
V. Attach this form to the document being submitted a	and send both to:	
Velma Mitchell, Acquisitions Coordinator ERIC Clearinghouse on Rural Education and Small Sc P.O. Box 1348	hools	

Phone and electronic mail numbers:

Charleston, WV 25325-1348

1031 Quarrier Street

800-624-9120 (Clearinghouse toll-free number) 304-347-0467 (Clearinghouse FAX number) mitchelv@ael.org

